CLASSIFICATION S-E-C-R-E-T

CENTRAL INTELLIGENCE AGENCY

INFORMATION FROM FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM

COUNTRY USSR

SUBJECT Economic - Petroleum

HOW PUBLISHED Daily newspaper

WHERE PUBLISHED Moscow

DATE PUBLISHED 7 Apr 1951

LANGUAGE Russian

DATE OF INFORMATION 1951

DATE DIST. 15 Jun 1951

NO. OF PAGES 2

SUPPLEMENT TO REPORT NO.

THIS IS UNEVALUATED INFORMATION

SOURCE Trud.

BAKU REFINERY INTRODUCES MORE EFFICIENT METHODS

At the Petroleum Refinery imeni Andreyev careful attention is being paid to the operations of the distillation columns and condensers. Prolonged experimentation has led to the discovery of a strict dependence between the amount of steam fed to the stripping column and the conditions within the installation. As a result, the following regulation of steam control was established in the case of refining illuminating kerosenes: the valve had to be opened by two turns of the wheel in the ligroine section, by a one-fourth turn of the wheel in the kerosene section, and by a three-fourths turn of the wheel in the solar oil section. Either an increase or a decrease in the steam fed into a section leads to a decrease in the output of light-colored petroleum products.

Workers at the refinery have also introduced preliminary cleaning of the condensers not only in the period assigned for preventive repair but also when the condensers are in operation. This has resulted in a considerable lowering of pressure at the top of the column and a maximum yield of light-colored petroleum products at the end of the run in the installation without decreasing its productivity.

Low pressure at the top of the column leads to more precise rectification. The installation yielded 97.8 percent of the possible maximum yield in the form of light-colored petroleum products in the first half of 1950 and in the second half of the year, 99.5 percent.

When Aga Guseyn Kafarov, Stalin Prize Laureate, started a competition to lengthen the time between repair in the exploitation of oil wells, workers at the Refinery imeni Andreyev studied his experience. They asked what was preventing them from increasing time for exploiting equipment between repair periods. The first obstacle was a sharp deterioration, at the end of the run, in the operation of the pipe still, caused by the formation of coke in the pipes of the still. This sharply lowers the coefficient of heat transfer and increases the thermal intensity of the aggregate. To decrease the amount of coke, they increased the amount of petroleum reflux and in this way achieved their goal.

SECRET

CLASSIFICATION S-E-C-R-E-T

STATE	X	NAVY	X	NSRB	DISTRIBUTION
ARMY	X	AIR	X	FBI	

The second obstacle was the premature clogging of the condensers and coolers which causes an increase of pressure in the distillation column, disrupting the precision of fractionation and decreasing the productivity of the installation. To keep the pressure regular in the distillation column, a new method of cleaning the surface of the condenser pipes was proposed. By this method the pipes are cleaned once a week with streams of water from the general system of the plant's water supply. Scum and dirt which are precipitated on the surface of the pipes are diluted and washed off. As a result, normal heat transfer was achieved throughout the entire between-repair period. Adopting Kafarov's method, the run of the installation was increased to 62 days instead of the 50 days called for by the plan.

Losses of petroleum in the refinery installation were lowered to 0.6 percent, as against a permissible norm of one percent. Workers of the installation effected a saving by paying strict attention to cleaning the dehydrators, and constantly watching over the condition of the pump gaskets, the valves, and the joints.

The introduction of a method of cleaning the heat exchangers with hot kerosene and water lowered petroleum product losses for the installation. Formerly, the exchangers had to be cleaned by a mechanical method every 120 days and, with every shutdown of the heat exchangers for cleaning, the petroleum products contained in them were discharged into the ditch. The new method made it possible to lengthen the run of the heat exchangers to 240 days.

Since the beginning of the second half of 1950, workers of the installation have been saving 30-50 tons of fuel per month as a result of improved conditions of combustion and air feed.

Workers of the installation have pledged to increase labor productivity further, and during 1951 have pledged several thousand tons of above-plan light-colored petroleum products.

- E N D -